# AB-examples and utilization

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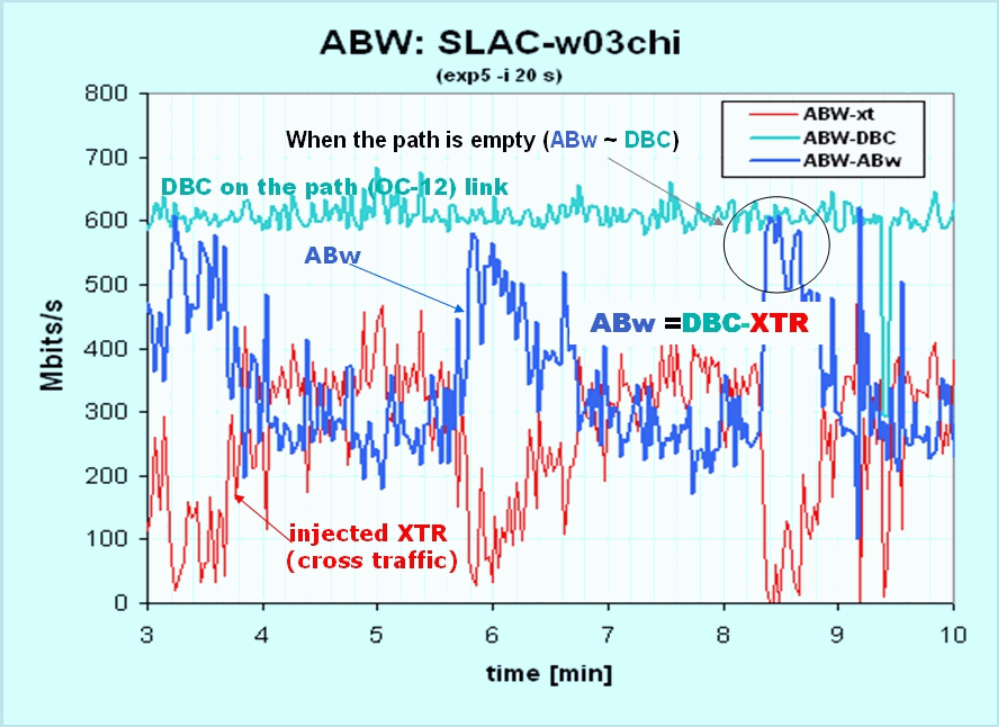
(SLAC)

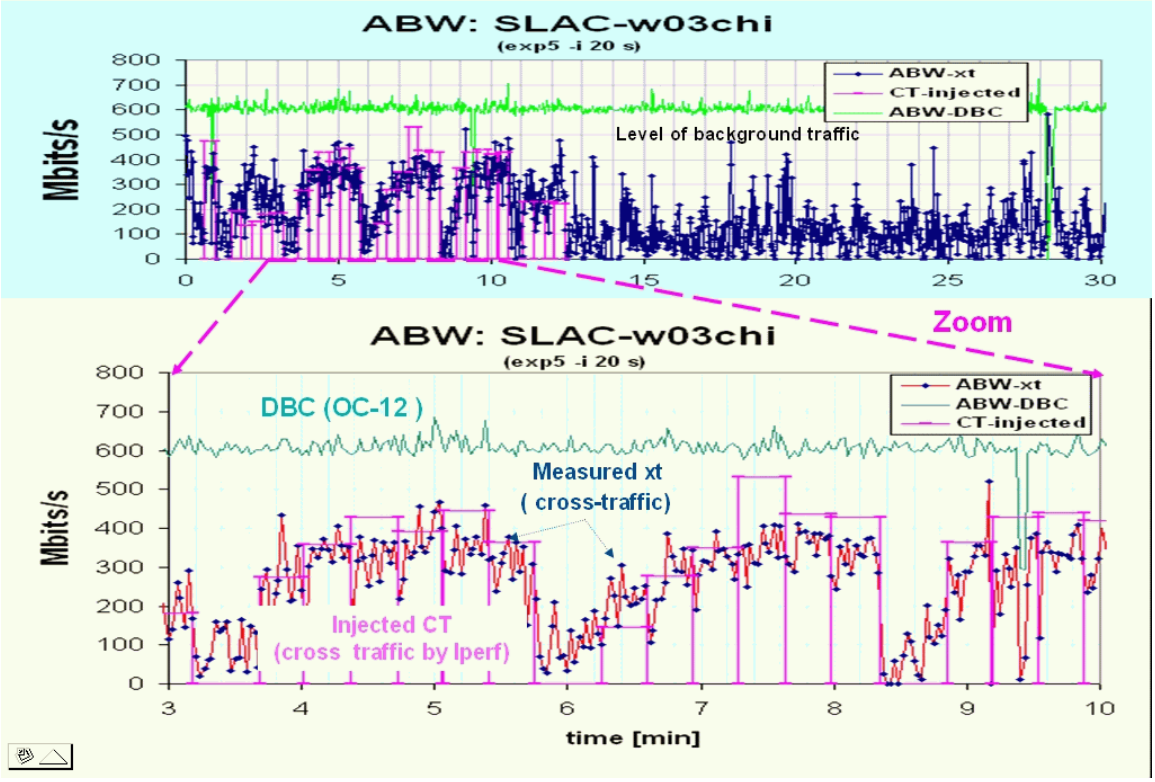
# Basic Relation of *Abw DBC XTR*

***on example with injected cross traffic***



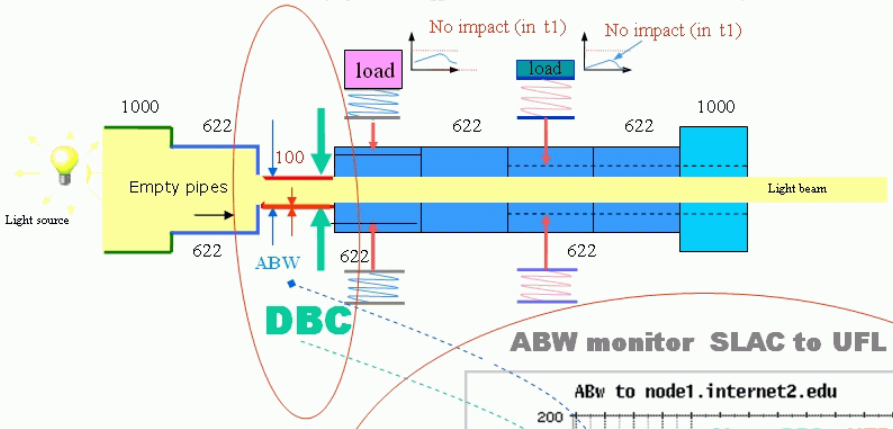
# The match of the cross traffic

**(ABW compare to injection traffic generated by Iperf)**

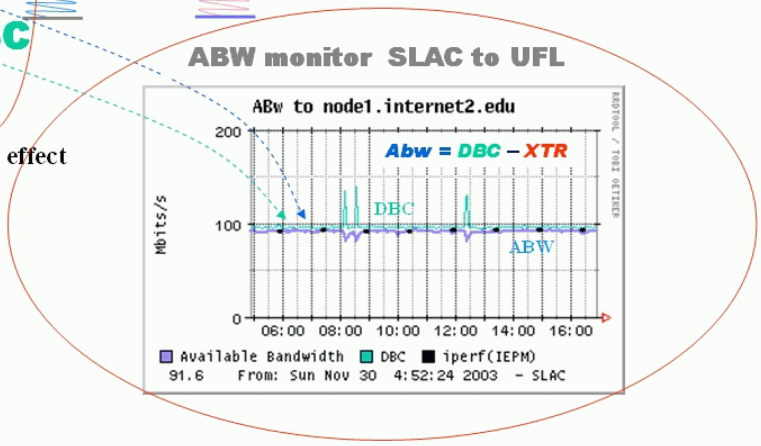


# ABwE: Example of narrow link in the path

(Pipes analogy with different diameter and slots)

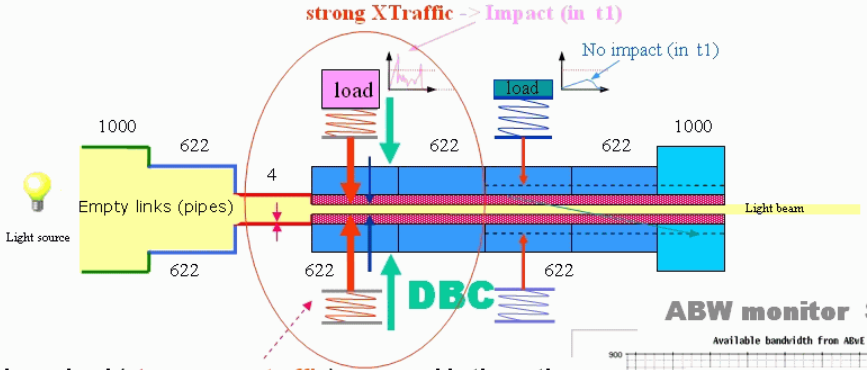



link that has domination effect on bandwidth

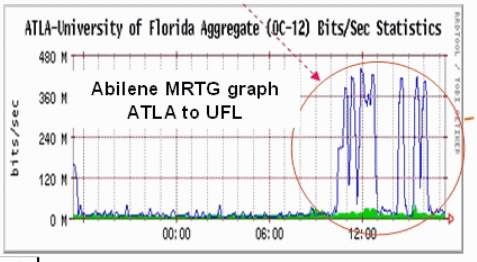


# Example of heavy loaded link in the path

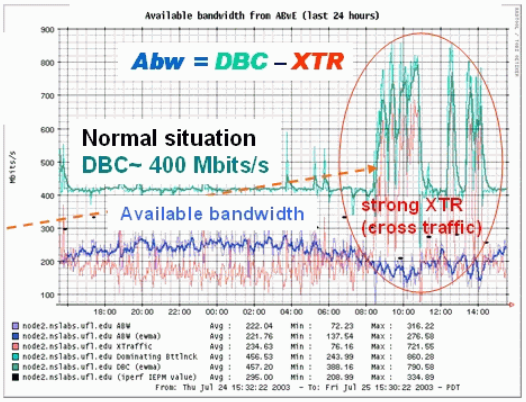
(Pipes analogy with different diameter and slots)

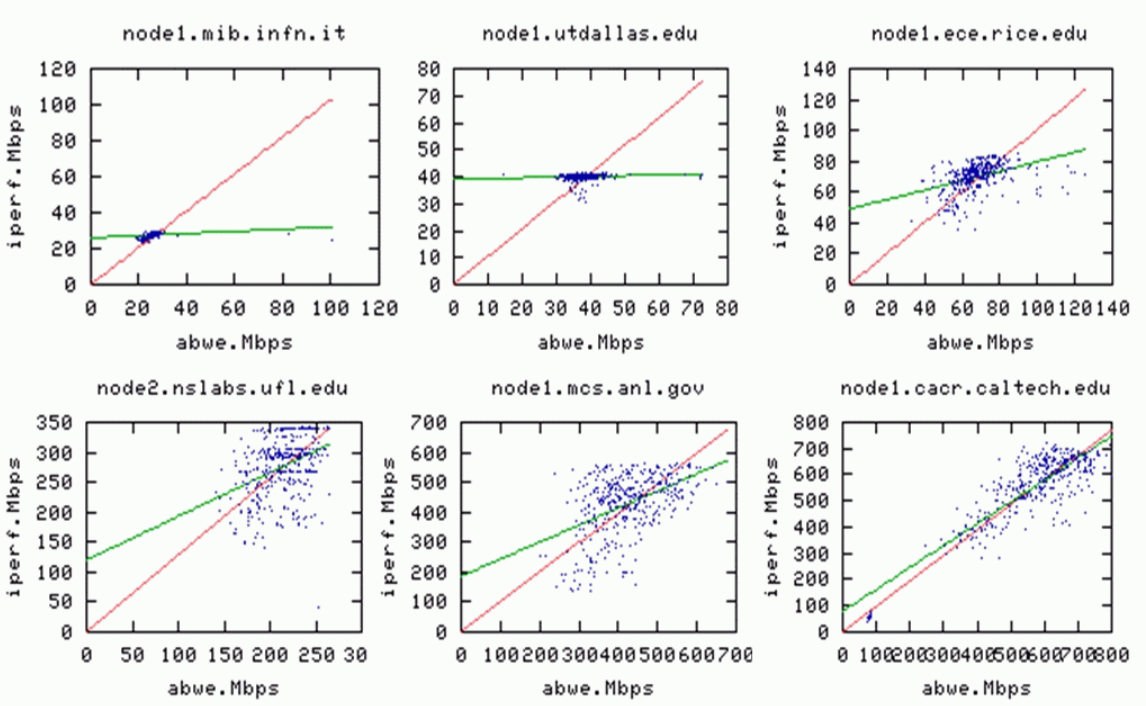



Heavy load (strong cross traffic) appeared in the path
It shows **new** DBC in the path because this load **dominates** in whole path !



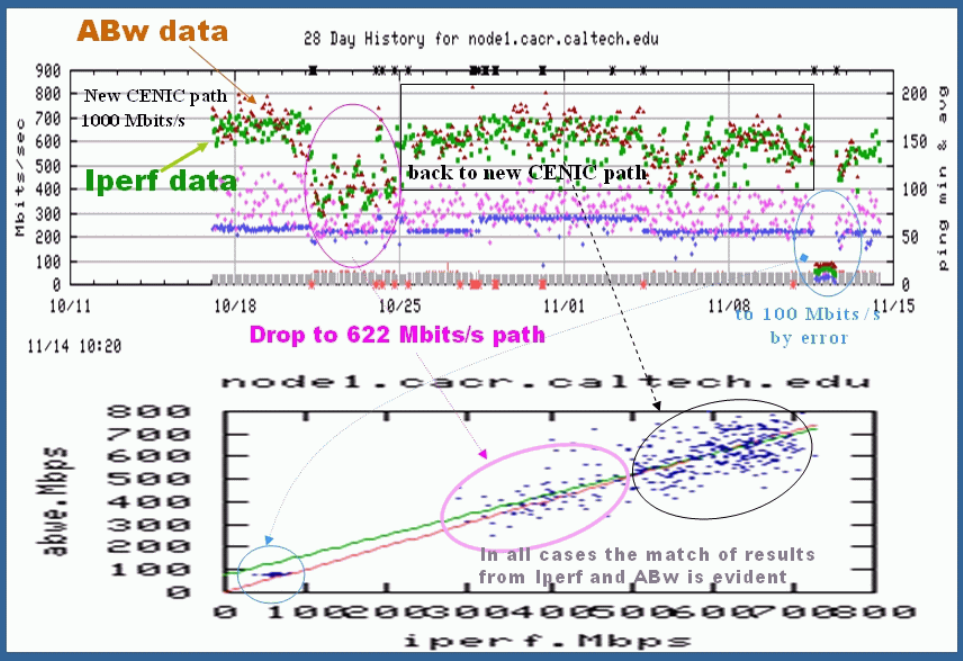

ABW monitor SLAC to UFL






**Scatter plot graphs Iperf versus ABw**
**on different paths (range 20–800 Mbits/s)**

(28 days history)

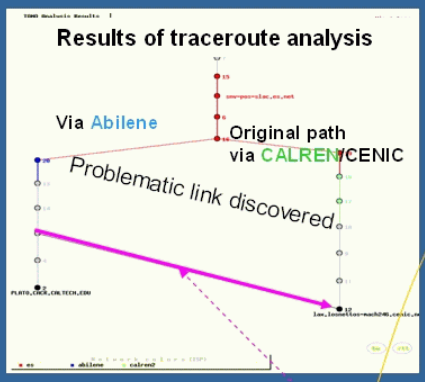


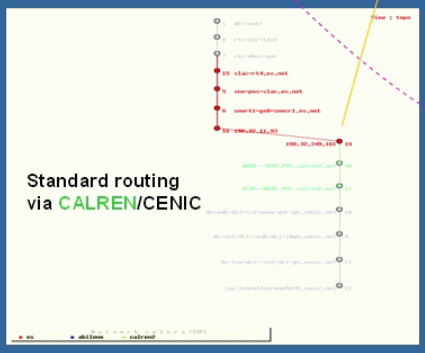

## 28 days bandwidth history

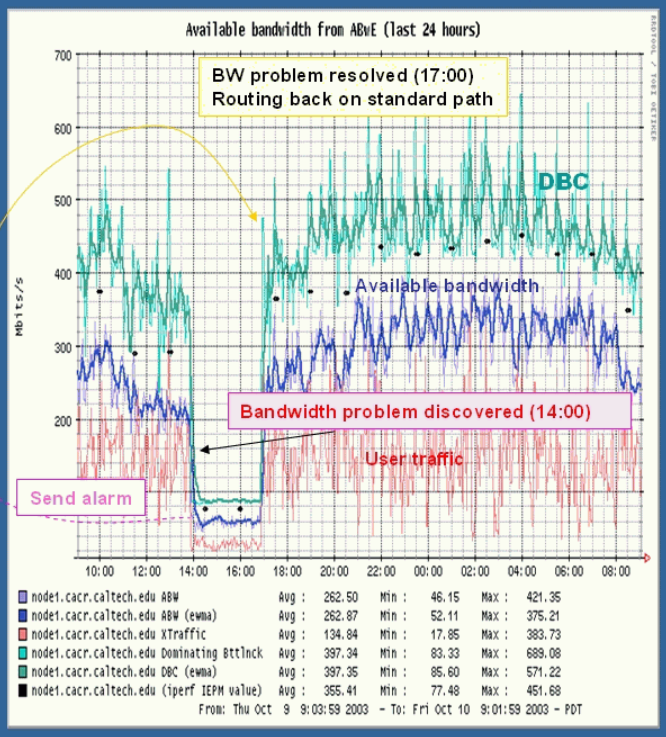
**During this time we can see several different situations caused by different routing from SLAC to CALTECH**

# ABw as Troubleshooting tool

## ( Discovering Routing problems and initiate alarming )




(Example from SLAC – CENIC path)

# SLAC – CENIC path upgrade from 1 to 10 Gigabit

(Current monitoring machines allow monitor traffic in range 1 < 1000 Mbits only)